

Lockheed Martin
Scientific Engineering, Response and Analytical Services
2890 Woodbridge Avenue Building 209
Edison, NJ 08837-3679
Telephone 732-321-4200 Facsimile 732-494-4021

DATE: March 21, 2012

TO: Kelley Chase, EPA Region 3 OSC
Cynthia Caporale, EPA Region 3 OASQA

THROUGH:

FROM:

Ex. 4 - CBI

SUBJECT: VERIFICATION/COMPLETENESS CHECK – DIMOCK, PA LABORATORY DATA
File 1202005 FINAL PART 1 of 3 R33907 03 15 12 1429.pdf

INTRODUCTION

On March 20, 2012, a review of the case narratives and corresponding certificates of analysis from the EPA R3 (Metals Report Posted Mar 15) was conducted at the SERAS facility in accordance with the Follow-Up Verification/Completeness Check agreed upon during our teleconference on Wednesday 2/8/12.

The assumptions for this review include the following: 1) Case narratives from the Regional labs and/or subcontract labs have been reviewed in accordance with Regional or Environmental Services Assessment Team (ESAT) protocols and contain all pertinent and complete information to conduct the completeness check. SERAS will base this review on the information provided by the laboratory and not on an actual data package; and 2) SERAS will relay any “red” flags to the EPA R3 personnel to resolve and determine data usability.

OBSERVATIONS

In accordance with Table 1 – Field and QC Sampling Summary (Rev01 - 2/3/12), Table 2 – Sample Analytical Requirements Summary (Rev01 – 2/3/12), Methods for Groundwater and Surface Water Samples and the R3 SOPs R3QA159-021511 for ICP, R3QA-116-021511 for ICP-MS and SW846 Method 8321/ASTM D773-11 Modified for glycols, the following observations were noted and need to be clarified/resolved.

File 1202005 FINAL PART 1 of 3 R33907 03 15 12 1429.pdf

1. Copper was found above the RL in FB18 collected on 2/15/12. FB16 collected on 2/13/12 and FB17 collected on 2/14/12 did not contain copper above the RL. Results for copper for sample HW07 should be qualified estimated “J”. The remaining samples in batches BB21502 (HW27z-F, HW27-F, Hw27z and HW27) and BB21505 (HW59, HW11-P, HW53, HW53-P, HW57-P, HW59-F, HW11-PF, HW53-F, HW53-PF, HW57-PF and HW57) should not be qualified in the result column in Scribe even though “B” flags were assigned by the laboratory.
2. The RPD for arsenic for sample HW27 (lab #1202005-08) exceeded the RPD criterion. Since the source result and the duplicate are within five times the RL and it is not possible to ascertain if the remaining samples in the batch are sufficiently similar, this reviewer agrees with the “J” qualifier applied to sample HW27 only. The “J” flag should be carried over into the Scribe result qualifier column.
3. The MS recovery for sample HW53 (lab #1202005-14) exceeded the 70-130% criterion. Since it is not possible to ascertain if the remaining samples in the batch are sufficiently similar, this reviewer agrees with the “J” qualifier applied to sample HW53 only. The “J” flag should be carried over into the Scribe result qualifier column.
4. The LCS recovery for tin for Batch BB22103 exceeded the 85-115% criterion. No additional qualifications

SERAS-172-DSR-032112_32

Lockheed Martin
Scientific Engineering, Response and Analytical Services
2890 Woodbridge Avenue Building 209
Edison, NJ 08837-3679
Telephone 732-321-4200 Facsimile 732-494-4021

are required since the samples were non-detect for tin in this batch.

5. The RPD for nickel for sample HW03 (lab #1202005-34) exceeded the RPD criterion. Since the source result and the duplicate are within five times the RL and it is not possible to ascertain if the remaining samples in the batch are sufficiently similar, this reviewer agrees with the "J" qualifier applied to sample HW03 only. The "J" flag should be carried over into the Scribe result qualifier column.
6. There were several metals that exceeded the secondary MCLs: Aluminum for HW57-PF; iron for HW57, HW03 and HW03z; and manganese for HW53, HW57, HW03, HW03-F, HW03z, HW03z-F and HW07
7. There were several non-typical metals that were detected in some of the drinking water samples for which no MCLs are available: Strontium for HW27z-F, HW27-F, HW55-F, HW27z, HW27, HW55, HW11-P, HW11, HW57-P, HW58, HW11-PF, HW11-F, HW58-F, HW03, HW03-F, HW03z and HW03z-F and uranium for HW27z-F, HW27-F, HW55-F, HW27z, HW27, HW55, HW11-P, HW11, HW53, HW53-P, HW57-P, HW58, HW11-PF, HW11-F, HW53-F, HW53-PF, HW58-F, HW57-PF, HW57-F, HW57, HW07 and HW07-F.
8. It is assumed that all required instrument QC in the method was run and was within the criteria listed in the EPA R3 SOPs since this information is not available in the laboratory report.

cc:

Ex. 4 - CBI

Ex. 4 - CBI ERT WAM

Ex. 4 - CBI ERT WAM

Ex. 4 - CBI